

### **Region 3 Plan Summary Folansbee, West Virginia PM-10 Maintenance Plan**

**Title:** Maintenance Plan and Contingency Measures for the Folansbee PM<sub>10</sub> Attainment Area

**Federal Register Date:** August 27, 2003, 66 FR 51544 (proposed rules), 66 FR 51459 (final rule).

**EPA Effective Date:** October 27, 2003

**State Submittal:** May 12, 2003

**Affected Area:** In Brooke County, the Follansbee area bounded on the north by the Market Street Bridge, on the east by West Virginia Route 2, on the south by the extension of the southern boundary of Steubenville Township in Jefferson County, Ohio, and on the west by the Ohio/West Virginia border.

**Summary of the Plan:** The maintenance plan indicates that the attainment inventory is the modeled attainment inventory. This inventory reflects allowable emission rates for all significant stationary sources. West Virginia provided some additional inventory information updated for 2001 showing that emissions from some of the sources in West Virginia had decreased over the past few years due to facility shutdowns and fuel switching. Any future increases in emissions or significant changes to the stack configuration/parameters from those modeled in the attainment demonstration due to new or modifying stationary sources would be subject to new source review requirements including a demonstration that the NAAQS is protected.

Steel and industrial facilities are the most significant contributors of PM<sub>10</sub> emissions in the area. PM<sub>10</sub> emissions from public roads do not play a significant role in nonattainment and their impacts were less than 5% of the PM<sub>10</sub> concentrations. Therefore no conformity budget is in place for Brooke County. Population in the incorporated area of Follansbee (which is larger than the nonattainment area portion) has increased slightly since 1990 and may experience a minor increase in population over the next ten years. However, population in Brooke County has been decreasing since 1990 and is expected to continue to decline over the next ten years. Manufacturing employment in the metropolitan area which includes Follansbee has been decreasing since 1994, and this decline in manufacturing is expected to continue for the next 10 years. As a result of these factors, PM<sub>10</sub> emissions are expected to remain at or below the emission levels used to demonstrate attainment for the next 10 years and the area is expected to maintain the PM<sub>10</sub> NAAQS for the next 10 years as it has for the past 10 years. Moreover as noted previously, any future increases in emissions and/or significant changes to the stack configurations /parameters from those modeled in the attainment demonstration due to new or modifying stationary sources would be subject to new source review requirements including a demonstration that the NAAQS is protected.

For purposes of assessing air quality, monitoring data in both West Virginia and Ohio were reviewed. The monitor in Brooke County, West Virginia has always been located outside the boundary of the maintenance area but is included in the review to provide an overall picture of air quality in the area. Both areas had originally been designated nonattainment based on monitored data in Ohio. The three monitors operating in the Jefferson County, Ohio area and the monitor located in Brooke County, West Virginia show that complete quality-assured, violation-free ambient air quality monitoring data has been recorded in this area for the past ten years. The daily standard is met if the expected frequency of values above  $150 \text{ ug/m}^3$  is 1.0 or less. During this time frame, there were no actual exceedances of the daily standard, and the average annual number of expected exceedances was less than 1.0 for that same time period. The annual standard of  $50 \text{ ug/m}^3$  is based on the average annual mean over three years. During 1999 through 2002 the maximum annual average recorded at these sites was  $35 \text{ ug/m}^3$ . Therefore, the area has attained and continues to attain both the daily and annual  $\text{PM}_{10}$  standard.

In the maintenance plan, West Virginia commits to continue the operation of the monitor in Brooke county in accordance with 40 CFR Parts 53 and 58. Information on Ohio's monitoring commitment can be found in EPA's notice approving the maintenance plan for Jefferson County on December 11, 2000 (65 FR 77308). West Virginia will review the air quality data on an annual basis to verify maintenance. West Virginia will also review its  $\text{PM}_{10}$  emissions inventory every three years.

**Control Measures Included As Part of the Plan:** As part of the attainment plan for the Follansbee Area, West Virginia had submitted, and EPA had approved, six Consent Orders for incorporation into West Virginia's State Implementation Plan (SIP). By entering into the Consent Orders, Wheeling-Pittsburgh Steel Corporation; Standard Lafarge; Follansbee Steel Corporation; Koppers Industries, Incorporated; International Mill Service, Incorporated; and Starvaggi Industries, Incorporated have agreed to comply with reduced allowable emission rates for PM-10. Consent orders with International Mill Service, Koppers Industries, Standard Lafarge, Starvaggi Industries, and Wheeling-Pittsburgh Steel provide for new or improved, specific dust control measures. Consent orders with Follansbee Steel and Koppers Industries require "add-on" control equipment. More detail is provided below:

**Table 1.--New Limits for Follansbee Steel**

Process	Control	Limit(s)		
		Unit	TSP (lb/hr)	PM-10 (lb/hr)
Terne Coaters No. 1, 2	Company has flexibility.	No. 1.....	2.00 (approx. 53% control)..	1.80 (approx. 53% control)
	Will probably require a new pollution control device such as a commercial precipitator.	No. 2.....	1.80 (approx. 71% control)..	1.66 (approx. 71% control)

**Table 2.--New Limits for International Mill Services**

Process	Control	Limit(s)
Sinter Receiving Hopper.....	Partial Enclosure & Spray.....	TSP <= 0.092 lb/hr, PM-10 <= 0.046 lb/hr, 5% opacity, 95% control efficiency.
Sinter Hopper..... Sinter Screens	Full Enclosure & Spray.....	Hopper--TSP (lb/hr) 0.092; PM-10 (lb/hr) 0.046. Screening--TSP (lb/hr) 1.84; PM-10(lb/hr) 0.938. 10% opacity, 95% control
Sinter Storage Piles.....	Water Spray.....	TSP <= 0.682 lb/hr; PM-10 <= 0.596 lb/hr; 5% opacity; 75% control of TSP & PM-10.
Unpaved Areas.....	Dust Control Plan.....	Program is the responsibility of Wheeling-Pittsburgh Steel Company under its consent order with WVAPCC. International Mill. Service is also responsible should Wheeling-Pitt, for any reason, not implement the program. (See Table 6.)

**Table 3.--New Limits for Koppers**

Process	Control	Limit(s)
Pitch Dryer.....	Baghouse.....	TSP <= (0.93 lb/ton). PM-10 <= (0.30 lb/ton).

**Table 4.--New Limits for Standard Lafarge**

Process	Control	Limit(s)
Slag Processing Plant.....	Company has flexibility.....	TSP <=19.13 lb/hr. PM-10 <=8.15 lb/hr. 10% opacity, 95% control.
Slag Receiving Hopper.....	Increase Web Suppression.....	TSP <=0.07 lb/hr. PM-10 <=0.06 lb/hr. 5% opacity, 80% control.
Paved & Unpaved Roads.....	Chemical Dust Suppressant.....	90% control.

**Table 5.--New Limits for Starvaggi Incorporated**

Process	Control	Limit(s)
Unpaved Roads & Parking Lots.....	Chemical Suppressant.....	90% control.

**Table 6.--New Limits for Wheeling-Pittsburgh Steel**

Process	Control	Limit(s)
Coal Crushing.....	Full Enclosure.....	TSP <=1.0 lb/hr PM-10 <=0.51 lb/hr; No visible emissions; 90% Control (PM-10).
Coal Sizing No. 1, 2.....	Full Enclosure.....	TSP <= 1.48 lb/hr PM-10 <= 0.76 lb/hr 5% opacity; 90% Control (PM-10).

Coke Pushing No. 1, 2, 3..... Existing Baghouse..... 2.14 lb/hr (approx. 0.022 lb/ton coal charged at maximum operating rate).

	Battery Stack	(lb/hr)	Approx. lb/ton of coal charged at maximum capacity
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Coke Underfiring No. 1, 2, 3, 8....None.....	TSP		
	No. 1.....	1.40	0.044
	No. 2.....	1.40	0.044
	No. 3.....	1.58	0.046
	No. 8.....	6.93	0.048
	PM-10		
	No. 1.....	1.35	0.043
	No. 2.....	1.35	0.043
	No. 3.....	1.52	0.046
	No. 8.....	6.65	0.047
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Unpaved & Irregular Paved Surfaces.....	Chemical Suppression.....	95% Control.	
Paved Roads.....	Flushing and Vacuum Sweeping.....	95% Control.	

The above-mentioned provision remain in effect and are considered permanent and enforceable. In addition to these emission reductions, other reductions have occurred since the attainment demonstration inventory was prepared and the modeled demonstration of attainment was performed. The sinter plant at Wheeling Pittsburgh Steel shutdown in 1999 and operations at International Mill Services are have also shutdown. The additional emission reductions resulting from these shutdowns are permanent and enforceable given that any reactivation of these facilities would be subject to applicable new source review requirements.

**Contingency Measures:** The maintenance plan contingency measures consist of control measures on suspect source material handling operations and/or potential fuel switching at fuel burning units. The State will track air quality data in the Follansbee area. Upon a determination that three exceedances of the PM<sub>10</sub> standard have occurred within a three year period, the State will notify subject companies that the potential for a violation exists. The companies must then prepare detailed action plans containing specific measures selected from the contingency measures for implementation in the event of a violation. These plans must be submitted to the State within 6 months of notification that the potential for a violation exists and the plan shall

include an implementation timeline such that the final milestone of the plan calls for implementation of the measures no later than 18 months after the company is notified that a violation has occurred. Within 6 months of a violation, the State will enter into a consent order or legislative rule to incorporate the specific measures and compliance deadlines in the action plan and these measures will be made federally enforceable.

**Subsequent Maintenance Plan Revisions:** The Clean Air Act also requires the State to submit a revision of the SIP eight years after the original redesignation request is approved to provide for maintenance of the NAAQS for an additional 10 years following the first 10 year period. The maintenance plan commits to submit this SIP revision.

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